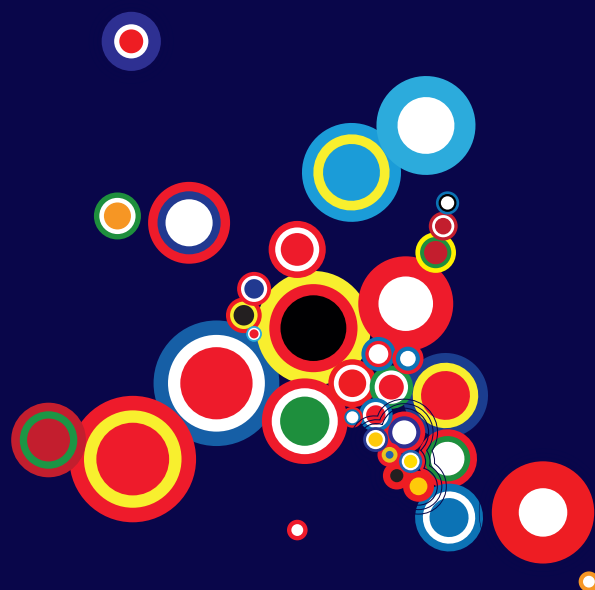




**INSTRUMENT FOR PRE-ACCESSION ASSISTANCE (IPA II)  
2014-2020**

**BOSNIA AND HERZEGOVINA  
AND SERBIA**

Regional reconstruction and  
improvement of flood  
protection infrastructure in the  
Sava River Basin



**Action Summary**

In May 2014, severe weather and damaging floods hit entire regions of Bosnia and Herzegovina and Serbia. As Bosnia and Herzegovina and Serbia belong to the same river basin, regional cooperation is necessary in flood prevention to prevent and limit downstream effects of floods.

The focus of the assistance will be on the rehabilitation and construction of flood prevention infrastructures both in Bosnia and Herzegovina and Serbia having cross-border impact.

<b>Action Identification</b>	
<b>Programme Title</b>	Special Measure for flood recovery and flood risk management
<b>Action Title</b>	Regional reconstruction and improvement of flood protection infrastructure in the Sava river basin
<b>Action Reference</b>	IPA 2014/ 037-703.6/ and IPA 2014/037-788.2 Special measure on flood recovery and flood risk management / Regional reconstruction and improvement of flood protection infrastructure in the Sava river basin
<b>Sector Information</b>	
<b>ELARG Sectors</b>	NA
<b>DAC Sector</b>	74010 - Disaster prevention and preparedness
<b>Budget</b>	
<b>Total cost (VAT excluded)<sup>1</sup></b>	EUR 20 million
<b>EU contribution</b>	EUR 20 million
<b>Management and Implementation</b>	
<b>Method of implementation</b>	Direct management
	The Delegations of the European Union to Bosnia and Herzegovina and to Serbia
<b>Location</b>	
<b>Zone benefiting from the action</b>	Bosnia and Herzegovina Republic of Serbia
<b>Timeline</b>	
<b>Deadline for conclusion of the Financing Agreement</b>	at the latest by 31 December 2015
<b>Contracting deadline</b>	3 years following the date of conclusion of the Financing Agreement, with the exception of the cases listed under Article 189(2) Financial Regulation
<b>End of operational implementation period</b>	6 years following the date of conclusion of the Financing Agreement.

<sup>1</sup> The total action cost should be net of VAT and/or of other taxes. Should this not be the case, clearly indicate the amount of VAT and the reasons why it is considered eligible.

## 1. RATIONALE

In May 2014, severe weather and damaging floods hit entire regions of Bosnia and Herzegovina and Serbia, resulting in several dozens of casualties in both countries, causing the destruction of public and private infrastructure, as well as hitting hundreds of thousands of households. Damages and economic losses amount to around €2 billion in Bosnia and Herzegovina and €1.5 billion in Serbia. Serbia and Bosnia and Herzegovina have entered the reconstruction phase, which aims at quickly recovering from the disaster, preventing further threats and curbing the negative effects of the floods on their already fragile economies.

At the International Donor's Conference for Bosnia and Herzegovina and Serbia held in Brussels on 16 July 2014 both countries committed to implementing flood protection, to work on flood defenses and to enhance climate resilient infrastructures. The two countries also committed to cooperating regionally for river basin management. Bosnia and Herzegovina and Serbia belong to the same river basin, which requires efficient regional cooperation. Therefore, inland waterway infrastructure needs substantial improvements and clear linkages with climate-resilient flood prevention and overall river basin management. River restoration and dredge activities need to be carried out to support also the natural capacity of rivers and floodplains to retain water. Embankments, dykes, and dams will need to be reconstructed and upgraded using internationally agreed norms for reconstruction.

The objective of this Action is to help Serbia in the recovery effort in the aftermath of the flood that hit the cross-border region during May 2014. Support provided will be based on the needs assessment which is conducted under the lead of national authorities coordinated by the Government of the Republic of Serbia, Office for Flood Affected Areas Assistance and Rehabilitation.

The Action consists of a set of activities related to flood protection infrastructure in the area of Macva region. The flood protection infrastructure mainly includes the embankments, river banks and bed regulations as part of disaster risk reduction.

Additionally, the objective of this Action is to implement flood-protection measures on the territory of Bosnia and Herzegovina, having also impact on the territory of Serbia. As Bosnia and Herzegovina and Serbia belong to the same river basin, regional cooperation is necessary in flood prevention. The measures on the Serbian territories will in addition have an impact on the Danube River.

In general, watersheds in Bosnia and Herzegovina are in the upper watersheds of the river Sava in the Republic of Serbia. By stabilising the targeted riverbeds and protecting river embankments the quantity of the debris taken downstream from Bosnia and Herzegovina to the Republic of Serbia will be considerably reduced. The accumulated debris has a damaging impact during the flash flood occurrences, since along with the increase of the water level in the riverbeds it causes the re-directing of the mainstream, erosions and damages of the natural riverbeds and thus damaging the buildings, infrastructure and agricultural land.

Republic of Serbia and Bosnia and Herzegovina have already established cross-border cooperation in the water thematic area. The cooperation was particularly intensified in the area of protection from water after the floods in the Drina river watershed in 2010. By bilateral efforts and through the international Sava river Commission there were funds for several projects ensured, some of which are already in preparation or implementation. These projects are expected to result in a better monitoring and measurement network, floods prognostic models, early warning systems and not the least facilities protecting from the Drina river waters. Finally, it is through regional actions like this one to equalise the protection levels both locally within Bosnia and Herzegovina with its entities and the Brčko District of Bosnia and Herzegovina and regionally with the Republic of Serbia in order to achieve the same level standards in the area of protection from water.

The current Action has been developed following the conclusions of Recovery Needs Assessment (RNA) supported by European Union (EU), the United Nations and the World Bank and following the conclusions of the Donor's Conference on 16 July 2014 in Brussels. The Action has also been prepared in accordance with the Action Plan for flood protection and water management of Bosnia and

Herzegovina, developed by the Working Group coordinated by the Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina.

The Action, more specifically, consists of improving flood protection infrastructures in the areas of the Drina river, Tuzla Canton and Brčko watersheds in Bosnia and Herzegovina, having a cross-border effect in terms of flood prevention for the Republic of Serbia.

## **PROBLEM AND STAKEHOLDER ANALYSIS**

### **Problem analysis**

#### ***Investments in the embankments reconstruction - Serbia relevant from the regional perspective with Bosnia and Herzegovina***

The heavy floods of May 2014 damaged large portions of flood protection infrastructure (mostly embankments), which failed either because they were overtopped or following underground erosion of their foundations (suffusion). In few cases, suffusion of material in dike foundation occurred and created holes under the construction that, then, rapidly enlarged and triggered the dike failure on a total length of 6.4 km. The high velocity of flood waves and large volume of sediments transported (sometimes, large rocks have been rolled over by the floods) produced severe erosion of the river banks and river beds and even destroyed the river bank protection; a total length of 45.6 km of river banks and beds was damaged. In some cases, the riverbed enlarged from 50 to over 300 meters, damaging other types of municipal infrastructure (roads, water supply pipe, cables).

According to data on historical floods in previous period (1896, 2010.), in accordance with *Preliminary flood risk assessment* (PFRA – Ministry of Agriculture and Environmental protection-2013.), riparian zone of the river Sava in the area of Mačva has a status of an most significant flood area, and a catastrophic floods that affected almost the entire territory of Serbia and a flood wave of the river Sava in May 2014, showed that Mačva is one of the most vulnerable areas in Serbia. Mačva area is of extreme importance since out of 30,000 ha of a floodplain area, around 80 % is highest quality farmland with present agricultural production. The total population in this area is about 130,000 inhabitants. Potentially, floods could threaten 15 settlements, including two towns: Sabac, with the industrial complex and utility infrastructures and the municipality of Bogatic.

The existing protection levees along the right riverbank of rivers Sava and Drina starting from Šabac (0+000) to Crna Bara (63+688) are part of a complex system of flood protection of the area of Mačva. Floods could potentially affect dozens of kilometres of roads, bridges, drainage channels and pumping stations, as well as drinking water sources.

This area is particularly important considering its regional character (border with Bosnia and Herzegovina and with Republic of Croatia). In addition, improving river management and floods infrastructures on Sava River will have a further impact further down on Danube River.

#### ***Improved flood protection infrastructure in the Sava river basin in Bosnia and Herzegovina, affecting Republic of Serbia***

Aiming to protect households, economic facilities, agricultural land and transport infrastructure 3 main flood protection activities are proposed by Bosnia and Herzegovina within this Action in the areas of the Drina river, Tuzla Canton and Brčko watersheds, all three influencing critically the Sava river watersheds in Serbia.

In recent years, the climate changes resulted in far more frequent forming of huge water waves at a wider area. Impact of the “Geneva cyclone” and long-lasting concentration of other cyclonic influences in our region caused two huge flood waves in the last four years. That is alarming and indicates a possibility of recurrence of such unfavourable climate influences. What is symptomatic and contradicting hydrological assumptions to-date is that extreme precipitations occur at wider areas, last longer and cause extremely huge water waves in the greater watershed of the river Sava (and its main tributaries). Consequently, due to a longer duration, huge water waves of lower probability follow each other thus causing extremely huge water waves in the main river Sava water stream.

Regarding the river Drina watershed, it means that in the forthcoming period huge water waves of the river Drina of a lower probability ( $p=1$  and  $0,1\%$ ) could to a greater extent coincide with extreme fluxes of the river Sapna (locality of Ekonomija) and so superpose highly damaging consequences in this area. Having in mind that each flood is an ecological incident (over spilling of septic and waste waters in rivers and underground, taking various debris in the river stream), and the population on the both sides of the river Drina is closely connected by family, cultural and business ties and activities; Drina as a border river could be seen only in the context of cooperation at the regional level, and the effects of reducing damaging impact of huge waters will definitely contribute to the economic development of this region.

The river embankments are not stable at the downstream river section of the Drina river from Hydro Power plant „Zvornik“ to the Drina's mouth into the Sava, influencing heavily the fluxes to Serbia. Currently, there are several locations in the Municipalities of Zvornik and Bijeljina in the downstream section of the Drina river, which need to be protected, as the river embankments are damaged at a length of 4,5 km. Also, the bank of the Drina river upstream from the mouth of the river Drinjača into the Drina to the Bratunac municipality, three locations (river embankments) of 1,6 km length need to be protected.

Last May floods, as well as the flooding events in the previous period, caused by the outpouring of high level waters of the Drina river, proved the urgent need to construct the left side embankment of the Drina River, in order to protect the „Ekonomija“ settlement in the Municipality of Zvornik. In order to protect it from the high level waters, the problems related to the polder need to be solved.

The catastrophic floods hit Tuzla Canton area in May and August 2014. The recovery and increase of the riverbeds' capacities in the Tuzla Canton will help preventing future floods and improve the protection of territories of Bosnia and Herzegovina and Serbia from water. Drina river is the most important cross-border watershed between Bosnia and Herzegovina and Republic of Serbia. It is directly influencing the Sava river by waters from Tuzla Canton watersheds and causes cross-border floods by taking huge waters into Sava river downstream to Serbia. More specifically for this Action, the Tuzla Canton watersheds including rivers Sapna, Janja, Turija and Drinjača, which directly run into Drina river, and rivers Tinja and Brka, which run into Sava river, need flood protection facilities to protect areas from water in both Bosnia and Herzegovina and Serbia. The Modrac dam on the Spreča river in Tuzla Canton is critical for protection of the Bosna river downstream area and for regulation of the Bosna river fluxes that influence heavily the Sava river downstream in Serbia. Moreover, a significant number of industrial facilities dealing with polluting and dangerous materials in the Tuzla Canton area present - in case of repeated floods - an environmental threat to both Bosnia and Herzegovina and Serbia.

The floods in 2014 have repeatedly (from April to September) affected the Brčko District of Bosnia and Herzegovina including particularly the river Brka watershed. Reconstruction of flood protection infrastructure is proposed on the river Brka riverbed (Phase I) on the section from the existing regulated part of the riverbed to the bridge MZ Klanac. River Brka runs into Sava river and it influences the water fluxes and is taking debris downstream the Sava river to Serbia.

## **Stakeholder analysis**

Serbia:

### ***The Office for Flood Affected Areas Assistance and Rehabilitation***

The Government of the Republic of Serbia established the Office for ***Flood Affected Areas Assistance and Rehabilitation*** (The Office) on 22 May 2014.

In particular, it conducts expert, administrative and operational affairs for the needs of the Government and mutual affairs of the Ministries and special organisations which are related to:

- coordination, monitoring and reporting in regards of the reception and distribution of the humanitarian and other aid addressed to the Government for the people affected by floods;
- establishment of standards and criteria, as well as the procedures for the distribution of aid;
- establishment of periodic and final reports on the aid distributed;

- coordination and preparation of partial reports and of the single report on the damage assessment;
- coordination of the preparation of priority, partial plans and of single plan for the recovery of the areas affected by floods;
- coordination of all necessary preceding activities and coordination of the overall conduct;
- monitoring and reporting of the conduct of the recovery plans of the areas affected by floods;
- coordination of the preparation of priority, partial plans and of single construction plan of the areas affected by floods;
- coordination of all necessary preceding activities and acts concerning the application of the construction plans for the area affected by floods;
- coordination, monitoring and reporting regarding the activities of the procurements necessary for the execution of the construction plans;
- establishment of standards and criteria and procedures of reporting during the realisation of the construction plans;
- coordination, monitoring and reporting regarding the finalised parts of the construction plans; drafting of the periodic and final reports on realization of the construction plans;
- and all other activities related to the assistance and recovery of the flooded areas and monitoring of the fulfilment of the obligations Ministries, special organisations and Government's services have regarding the activities of the assistance and recovery of flooded areas.

### ***Ministry of Agriculture and Environmental Protection***

The **Ministry of Agriculture and Environmental Protection** (MAEP) is responsible for overall policy definition in the agriculture sector and in the environment sector. Also, MAEP, through the Directorate for water bears overall responsibility for water management issues. However, responsibility for water management is shared with the competent authority of the autonomous province, the competent authority of the local self-governing unit, and public water management enterprises, in accordance with the provisions of the Law on Waters. The **Water Directorate** is responsible for water management policy, multipurpose water usage, water regime, protection from water - flood protection, water protection measures, international cooperation, other activities according to the Law on Waters (Official Gazette 30/10 from July 2010) and has a significant role related to implementation of water related projects. In implementation of this mandate, MAEP collaborates with other ministries (e.g. Ministry of Interior, Ministry of Construction, Transport and Infrastructure, etc.), and other institutions at national level relevant in water management sector are Republic Geodetic Authority, Republic Hydro-meteorological Service of Serbia, Statistical Office of the Republic of Serbia and Public Water Management Companies. MAEP is responsible for water management on "level 1" water courses and actual implementation of this mandate is delegated to three Public Water Management Companies (PWMC): Srbijavode PWMC, VodeVojvodine PWMC and Beograd Vode PWMC.

Flood defense planning in Serbia is organized in line with the provisions of the Law on Waters. Namely, MAEP is responsible for preparation of the Overall Flood protection plan which is covering a 6 year period. Once agreed among all relevant institutions, Overall Flood protection plan is adopted by the Government of the Republic of Serbia. Overall Flood protection plan is complemented by the annual Flood protection Action plans defined and adopted by the MAEP. which are ad

The Overall Flood protection plan consists of: prevention measures and activities, measures and activities which should be undertaken in the period when high water levels are alerted institutional set up in terms of flood prevention. Also, Overall Flood protection plan defines duties, roles and responsibilities of institutions and their representatives who are leading flood protection. Current Overall Flood protection plan is covering period 2012 - 2018.

The complementary action plan contains: river sectors and sections, flood protection objects – levees, dams, companies and organizations in charge of flood protection, flood protection managers, flood protection levels criteria and protected areas.

There are three Flood protection levels which are defined based on the complexity of the flood protection actions which need to be applied: Regular flood protection, emergency flood protection and emergency situation due to flood.

Regular and emergency flood defense are declared when water level at relevant gauging station achieves levels defined in the Action Plan. In case that, water level at relevant gauging station achieves critical water level or critical level of the flood protection system defined in the Action Plan and when the further increase of water level is expected, leading flood protection manager suggests to Ministry responsible for water management to declare the emergency situation due to flood.

In the case of the emergency situation due to flood scenario, main role is on PWMC to provide technical documentation, stuff, equipment and other mechanization needed for effective flood protection measures.

Lead beneficiary and proponent of the action is **PWMC "Srbijavode"** covering the largest part of the Republic of Serbia. PWMC "Srbijavode" has been established with the purpose of executing the activities related to the water resources of the Republic of Serbia, monitoring of water regime, maintenance and reconstruction of waterworks structures, drainage and flood protection, protection from erosion, exploitation of sand and stone in sense of improvement of water regime, protection of water from pollution, etc.

PWMC has experience in realisation of large investment projects, namely, from 2009 till 2013. Engineers from PWMC participated in a programme financed by the World Bank financing support in total value of 2,7 bill. RSD (app. 27 mil. Euro) at 17 locations all over the territory of Serbia. The programme included works on reconstruction and construction of 65 km of embankments, regulation works on total 55 km river bed (From Sabac to Drenovac, Low catchment of Jadar river, river Jesenica in town Velika Plana, river Mlava in town Petrovac and Stari Kostolac, Danube river in Golubac, etc.), reconstruction of about 165 km of irrigation channels within Municipality Smederevo, Negotin valley and Macva district.

#### Bosnia and Herzegovina:

A Working Group has been set up in Bosnia and Herzegovina with the task to draft an Action Plan for flood protection and water management by the end of September 2014<sup>2</sup>. The Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina has a coordinating role within the Working Group.

The Working Group consists of representatives competent for flood protection and water management, i.e.:

- Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina (MoFTER);
- Government of Brčko District Bosnia and Herzegovina;
- Ministry of Agriculture, Forestry and Water Management of Republika Srpska;
- Federal Ministry of Agriculture, Water Management and Forestry;
- Public Institution - Vode Srpske;
- Sava River Watershed Agency Sarajevo, Federation of Bosnia and Herzegovina;
- Agency for Watershed of Adriatic Sea in Mostar, Federation of Bosnia and Herzegovina;
- Republic Hydro-meteorological Service of Republika Srpska;
- Federal Hydro-meteorological Institute.

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<sup>2</sup> Bosnia and Herzegovina Ministry of Foreign Trade and Economic Relations, the Minister, Letter to the EU Delegation to Bosnia and Herzegovina H.E. Mr. Peter Sorensen, Ambassador, No: 06-06-28-1 485-21 1 4, Sarajevo, 14 July 2014. See also Ruling, 06-02-1603/14, 14.07. 2014.

The country of Bosnia and Herzegovina has two major, highly autonomous “Entities”: the Federation of Bosnia and Herzegovina and Republika Srpska. Each has its own laws that impact the delivery of water and wastewater services, addressing most aspects of technical, administrative and financial matters. The same competences the Brcko District of BiH has on its own territory.

### ***The role of Ministry of Foreign Trade and Economic Relations of BiH***

The role of the State in the sector has been increasing in Bosnia and Herzegovina over the past years, in view of increasing international obligations of the country and a need for an improved coordination at state level and ensuring more efficient use of scarce resources available to the Sector. The State level coordination role is assigned to the Ministry of Foreign Trade and Economic Relations and its Sector for Natural Resources, Energy and Environmental Protection. A Water Resources Department was established within this Sector with the main goal to provide effective coordination among institutions of the water sector in Bosnia and Herzegovina, as well as to provide adequate coordination and cooperation at international level.

### ***Water and Environment Ministries in the Entities***

In the Federation the main authorities responsible for environment and water issues are the Federal Ministry of Agriculture, Water Management and Forestry and the Federal Ministry of Environment and Tourism (following a recent restructuring). A significant part of competences in FBiH belong to the Cantonal Ministries responsible for Waters and Environment.

The Federal Ministry of Agriculture, Water Management and Forestry is responsible for the water policy and strategy development, setting of standards and regulations. The Federal Ministry of Environment and Tourism is responsible for the preparation of the environmental policy and strategy-related documents, quality standards for air, water, and soil, issuing the environmental permits, environmental monitoring as well as supervision of relevant institutions from the environment sector. The competent cantonal ministries are also taking part in water and environment management according to their own responsibilities, among which are: construction of the water & sanitation infrastructure, flood protection structures on the second category water courses, water permits etc.

Similar to the FBiH, there are two Ministries in the RS, responsible for environment and water issues, namely: the Ministry of Agriculture, Forestry and Water Management in RS and the Ministry of Spatial Planning and Ecology of RS. Their competencies are similar to the competences of the ministries in FBiH.

In addition to the above-mentioned ministries, several other institutions in Bosnia and Herzegovina deal with water issues directly and indirectly. These include Water Agencies in both Entities, other ministries, independent administrative offices and institutions, and institutions related to the ministries. Other ministries with secondary responsibilities for water are usually the ones dealing with health, industry, energy and mining (or the economy in general), labour and public welfare.

The Ministry for Environment and Tourism in FBiH, and the Ministry of Physical Planning, Construction, and Ecology in RS are responsible for the preparation of the environmental policy and strategy-related documents, quality standards for air, water, and soil, environmental monitoring as well as supervision of relevant institutions from the environment sector.

### ***Agencies for Watershed Sava (Danube) and Adriatic in Bosnia and Herzegovina***

There are two watersheds in BiH: Sava (Danube) and Adriatic. According to the delineation of river basin, two Agencies for Water management were established in FBiH (Sarajevo and Mostar), while in RS there is a Public Institution - Vode Srpske located in Bijeljina.

The tasks of the Agencies, according to Water Laws, are the following:

River basin water resources management; preparation of all strategic planning documents concerning water resources management, water quality and quality monitoring, flood control and management, issuing water permits, preparation of expert material for drafting of water secondary legislation, establishment and management of water sector information system, organisation of operation and



maintenance of the principal water facilities such as flood protection systems, regional water supply system etc, investment management and construction supervision of water related infrastructure, issuing water management guidelines, agreements and permits.

The Water Agencies also fulfil different tasks and obligations regarding the agreements and conventions that Bosnia and Herzegovina has signed and ratified so far.

## **LESSONS LEARNED AND LINK TO PREVIOUS FINANCIAL ASSISTANCE**

### *Lesson learned*

A common thread has been that the most vulnerable locations and the most vulnerable people are hit the hardest. These events have also shown the need for continuous and robust risk management policies, whereby each Euro invested in the disaster risk leads to a reduction of 4 to 7 times in reduced damage costs. Likewise, experience has shown that the systems for disaster risks management also act as a strong driver of innovation, growth and job creation. The key steps applied in the EU as learned from these events include mandatory risk assessment, enhanced preparedness, and integration of risk management measures in a number of key policies and financial instruments (climate change adaptation, transport and energy, research and innovation, as well as in the use of structural and cohesion funds).

Three key lessons learned are directly applicable to the current Action.

Firstly, the collection and sharing of globally comparable data on disaster loss and hazards requires accuracy and transparency. Without clear, transparent and comparable data, disaster relief efforts cannot take place in an effective manner, and neither can future disaster mitigation and risk management. An important part of this is the adoption of clear standards for the collection of the needs assessment data – thereby the Post Disaster Needs Analysis (PDNA) agreement between the EU and UN/WB.

Secondarily, there is a need for immediate action and impact in disaster cases, such as the floods in Bosnia and Herzegovina and Serbia and the region. The need includes to set up action oriented targets and measurable deeds and, in particular, this means that the actions should target vulnerable groups first. Overall, disaster relief should contribute to sustainable and smart growth. It should channel potential for productive investments to contribute to growth, jobs and competitiveness.

Thirdly, it is important to build on the specific experiences of disaster recovery in each vulnerable sector and to incorporate these lessons into future policy making with a view to building preventative measures. Many of the worst effects of the floods might have been prevented or lessened by such an approach.

These lessons are the guiding principles in the optimisation of the financial assistance that has been made available by the Government of Serbia and the entire Donors community to recover damages and face major risks in the aftermath of the May 2014 flood.

The realisation of the present intervention must be considered a matter of urgency. The target is “*getting ready*” before the next rainy season. The proposed investment, therefore, has been studied to respond the criteria of maximum efficiency (in terms of response to climate change, early warning, disaster prevention and risk reduction) and minimum cost, both of them essential to guarantee the immediate implementation under the given conditions, as well as immediate feasibility.

In addition, the existing Public Enterprise Companies, Public Water Management Companies and agencies have extensive previous experience and will have sufficient capacity to manage and implement many of the planned activities described in this Action Document.

### *Financial Assistance*

#### *Serbia*

After the floods that affected the country, the Government of Republic of Serbia declared a state of emergency for its entire territory. A request for assistance was sent to the international community. Immediate and urgent assistance in staff and equipment, required for saving human lives, preventing further deterioration of the situation and safeguarding vital infrastructure systems, was provided by

teams from 15 countries. They provided assistance in equipment, lifeboats, high-capacity water pumps, power generators, water tanks, machinery, helicopters and specialized emergency response teams.

In addition, the United Nations Disaster Assessment and Coordination (UNDAC) and EU Civil Protection teams were involved in coordinating the stay and engagement of the various international teams. Focal activities were: biological decontamination of the land and supplying the population with water, medicines and food, and others were landslide remediation, strengthening of embankments, pumping out water, monitoring of sanitary conditions in the reception centres.

In order to put this recovery on a sound planning basis the government has requested technical assistance from the international community to conduct a Recovery Needs Assessment and these has been organized between EC, UN agencies and WB.

EU IPA assistance funds were reallocated to post-flood recovery. EUR 30 million was reallocated under IPA 2012 programme to support short-term recovery and reconstruction in the following sectors: public buildings, private housing; and agriculture. In addition, through a Contribution Agreement with UNOPS, the EU Delegation has allocated EUR 1 million as part of the floods recovery funds to strengthen staff capacity in the Office of flood reliefs of the Government of Serbia and in other bodies, including the Serbian European Integration Office (SEIO).

Also, from the European Union Solidarity Fund (EUSF), the European Commission approved the application submitted by the Republic of Serbia in October and proposed a draft budget of 60.2 million EUR to cover the following operations:

- Rebuilding key infrastructure and energy facilities (including water supply systems, telecommunications and health care and educational facilities)
- Temporary accommodation for vulnerable population groups,
- Protection of cultural and national assets of special national and wider interest,
- Cleaning designated natural preserves and zones of wider societal significance.

In addition the Cross-border Cooperation Programmes between Serbia and Bosnia and Herzegovina, and Serbia-Croatia will be directed to support funds for the recovery of the affected cross-border areas.

#### Bosnia and Herzegovina

Urgent response to the floods in Bosnia and Herzegovina was related to the evacuation and care about the people evacuated from the flood-affected areas, delivery of the humanitarian aid for the affected population and delivery of the emergency equipment. The assistance in the period following the urgent response was focused on the rehabilitation of the infrastructure and restoring livelihood in the affected areas. More than 40 countries and international organizations supported the authorities of Bosnia and Herzegovina to cope with this humanitarian catastrophe.

After the floods, the assistance of the European Union to Bosnia and Herzegovina was re-allocated for recovery of the flood-affected regions. From the national IPA 2011-2013 there were 42.24 million euros allocated to the EU Floods Recovery Programme, being implemented by the UNDP with the aim to establish normal living conditions in the affected areas. There were 15 million euros from the national IPA 2014 funds allocated: a) to provide support to the civil society organizations to carry out activities related to the social and economic recovery of the flood affected areas; b) to support the small and medium size enterprises recovery in the flood affected areas; c) to strengthen the civil protection capacities in BiH for urgent response in case of disasters, and d) to contribute to the Regional IPA special measure programme. Under national IPA 2012, there were 1.75 million euros of savings allocated for floods recovery in the Justice sector.

Regional IPA special measure programme, besides this Action, includes 15 million euros for Support to the flood protection and water management in Bosnia and Herzegovina, with the purpose of re/building infrastructure for protection from potential floods at the sites with highest flood risk, and to improve the forecasting system for Sava river basin, and 12.5 million euros for reconstruction of homes and support to income generation for population in the flood affected areas.

Bosnia and Herzegovina and Republic of Serbia regional projects - on-going or being prepared - in the watersheds of rivers Sava and Drina:

1. The Sava River Commission (WBIF) approved 2 million EUR project for “Improvement of Joint Actions in Flood Management in the Sava River Basin“, including 2 components:

1.1. Flood Risk Management Plan for the Sava River Basin, including Programme of Measures (Component 1);

1.2. Flood forecasting and warning system for the Sava River Basin (Component 2).

2. WB/IDA loan project “Urgent measures on the river Drina watershed in Bosnia and Herzegovina”, 24 million USD (ca 19 million EUR) – components in the Federation of Bosnia and Herzegovina and Republika Srpska.

3. GEF /SCCF Western Balkans Project “Managing the river Drina watershed (Bosnia and Herzegovina, Montenegro, Republic of Serbia)”, 10 million USD (ca 8 million EUR) (World Bank).

3.1. Multi-state Cooperation on International Drina Management (SCCF 0.5 million USD/ca 0.4 million EUR; GEF IW: 2.6 million USD/ca 2.0 million EUR).

3.2. Pilot investments for Integrated Basin Management and Climate Change Resilience and Flood and Drought Management (SCCF 3.7 million USD/ca 2.9 million EUR; GEF IW: 1.5 million USD/ca 1.2 million EUR)

3.3. Project Management and Monitoring and Evaluation (SCCF 0.1 million USD/ ca 0.08 million EUR; GEF IW: 0.2 million USD/ ca 0.16 million EUR)

4. MoFTER Bosnia and Herzegovina project „Support to Water Resources Management in Drina River Basin” (WBIF, 1.2 million EUR).

## 2. INTERVENTION LOGIC

### LOGICAL FRAMEWORK MATRIX

OVERALL OBJECTIVE	OBJECTIVELY VERIFIABLE INDICATORS	SOURCES OF VERIFICATION	
To help Serbia and Bosnia and Herzegovina in the recovery effort in the aftermath of the catastrophic floods of May 2014 with the intention of allowing private persons, business and public services to resume their normal functions as soon as possible .	Key economic and social indicators in most severely affected municipalities return to pre-flood levels	EC Progress Report Reports from Statistical Office	
SPECIFIC OBJECTIVE	OBJECTIVELY VERIFIABLE INDICATORS (OVI)	SOURCES OF VERIFICATION	ASSUMPTIONS
<b>Specific Objective:</b>  To improve flood protection infrastructure in the Sava river basin, on the border between Serbia and Bosnia and Herzegovina	Embankments restored  % of increase of the protection level of the Sava river basin	Regular reports of Office for Flood Affected Areas Assistance and Rehabilitation	Government maintains high commitment for floods restoration and recovery Responsible Serbian institutions have sufficient capacity to prioritise the implementation of planned activities. Technical documentation is of sufficient quality and is produced on time
RESULTS	OBJECTIVELY VERIFIABLE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS
<b>Result 1</b> Rehabilitation of embankments	I 1. km of rehabilitated embankments	Site visits, invoices, reports produced by Water directorate, PE Srbija Vode during and after rehabilitation works/repairs Annual Report on the state of the environment in the Republic of Serbia	Available resources, existing relevant object documentation and appropriate weather condition to fulfil planned activities.
<b>Result 2</b> Improved flood protection infrastructure in the Sava river basin in Bosnia and Herzegovina, affecting Republic of Serbia	I 2.1. % of improved flood protection facilities I 2.2. km of reconstructed flood protection infrastructure	Action progress reports Competent institutions annual reports	
ACTIVITIES	MEANS	OVERALL COST	ASSUMPTIONS
<b>Activities to achieve Result 1:</b> Activity 1.1. Reconstruction of damaged right Sava embankment : Section 1 (km 52+832 to km 58+540)  Activity 1.2. Reconstruction of damaged right Sava-Drina embankment: Section 2 (km 58+540 to km 63+753)  Activity 1.3 Reconstruction of damaged right Sava embankment: Section 3: from km 18+029 to km 23+342, (5,07 km) Activity 1.4 Provision of effective works supervision services in line with the best engineering practice	Works contract (1.1;1.2;1.3)  Service contracts (TA) for supervision (1.4)	EUR 10 000 000	

<b>Activities to achieve Result 2:</b> Activity 2.1. Recovering flood protection infrastructure in the Tuzla Canton watersheds Activity 2.2. Protecting the areas from high level waters of Drina river Activity 2.3. Reconstructing the flood protection infrastructure on the river Brka (Phase I)	Works contract Service contract for Supervision	EUR 10 000 000	
		Total EUR 20 000 000	

Precondition for implementation of the activities related to result 1.1 in the Republic of Serbia are connected with the acquisition of land which needs to be completed on the 18ha, where estimated amount of funds which are needed are 200.000 €.

## DESCRIPTION

**Specific Objective:** To improve flood protection infrastructure in the Sava river basin, on the border between Serbia and Bosnia and Herzegovina

### **Result 1. Reconstruction of the right embankment on the River Sava - Macva West and East zone**

This project concerns reconstruction of the levee on the right riverbank of rivers Sava and Drina belonging to West zone, in total length of 10 921 m, in the following sections:

- Section 1: from km 52+832 to km 58+540 (length 5,666 m)
- Section 2: from km 58+540 to km 63+753 (length 5,255 m).
  
- East zone includes Section 3 which is 5,07 km long from km 18+029 to km 23+342.

#### ***Activity 1.1. Reconstruction of damaged Sava River embankment Section 1 (km 52+832 to km 58+540)***

Section 1 of the embankment: 5,708 m long (km 52+832 to km 58+540) and about 3.5 to 4 m high. The width of the crown is 7 m. However, due to configuration and low elevation of the terrain, there is significant leakage around the embankment foot indicating the need for its reconstruction.

#### ***Activity 1.2. Reconstruction of damaged Sava River and Drina River embankments Section 2: (km 58+540 to km 63+753)***

Section 2 of the embankment: 5,213 m long (km 58+540 to km 63+753) is comprised of the subsections:

- The right embankment around Crna Bara with the crown 4 to 5 m wide about 1 to 2.5 m high, and
- The right embankment from Crna Bara to Crnobarski Salas of 1 to 1.5 m height and 5 m wide crown which also needs reconstruction due to excessive leakage during high water.

Type of works envisaged for the Section 2 are:

- Camber of the embankment up to 0,8 m
- Protection of the embankment crown with stabile road construction
- Reconstruction of existing access roads and construction the new ones in the total length of 15,8 km,
- Protection from Drina water sector by the reconstruction of local roads in the area of Mačvanski Prnjavor in the total length of 12,9 km
- Drainage layers within the service road in the total length of 11.5 km
- Reconstruction of the existing barriers and construction the new ones (8 barriers in total)
- Construction of the facility for guards and defense services including the space for the equipment and its storage.

#### ***Activity 1.3. Reconstruction of damaged Section 3: from km 18+029 to km 23+342 East zone***

Section 3 from km 18+029 to km 23+342 is 5,07 km long and includes secondary flood protection line (Macva 1). Type of works envisaged for this section is reconstruction of embankments and structures within the embankments (Pumping Stations and service and access roads). Concretely:

- Protection of the embankment crown with stable road construction
- Reconstruction of existing access roads and construction the new ones in the total length of 3,6 km,
- reconstruction of local roads in the total length of 18,2 km
- Drainage layers within the service road in the total length of 5,6km
- Reconstruction of the existing barriers and construction the new ones (8 barriers in total)
- Construction of the facility for guards and defense services including the space for the equipment and its storage.
- Reconstruction of the Pumping Stations „Kalenića-Ravenica“ i „Čevrtija“, rehabilitation and modernisation of the equipment on the PS „Kalenića-Ravenica“, reconstruction of the access road (0,7km), manipulative plateau and and embankment in the zone of supply and discharge channels.

The west zone of the right embankment of the River Sava and River Drina belong to Municipalities Bogatic and Banovo Polje, while the east zone of the right embankment of the River Sava, belong to Municipalities Šabac.

All the above mentioned activities will create significantly positive impact on the flood protection system both in Serbia and Bosnia and Herzegovina. In the course of construction it will be of crucial importance that the strong coordination is ensured between the responsible institutions from Serbia and Bosnia and Herzegovina.

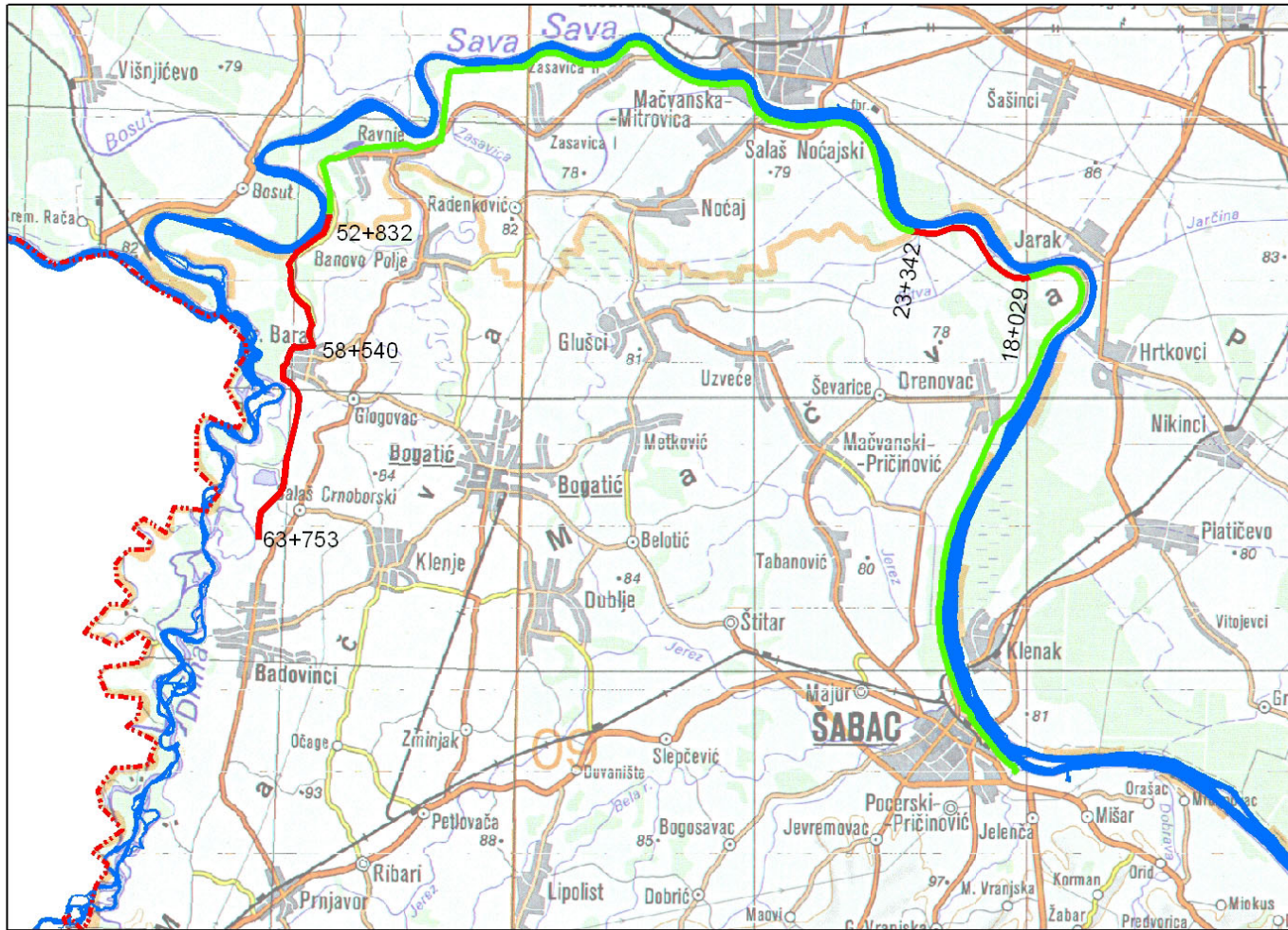
**It is necessary to coordinate the construction of this system with Bosnia and Herzegovina seeing the impact of the system and creation of a comprehensive protection system.**

In that context, the required level of protection of this area on the right riverbank of rivers Sava and Drina, defensive line of the levee in the length of 63.7km, has been analyzed in the framework of the „Conceptual project of the reconstruction of the levee along the right bank of rivers Sava and Drina in the area of Macva“ (ITSC Ltd.Yu.d.o.o. and Faculty of Civil Engineering-University of Belgrade, 2006).

Rank of potentially threatened assets and a risk of flooding justify construction of reliable defensive line with a protection of High Water Levels HWL floods probability of 1% (100-year HWL) and protection height (elevation) of the levee crown for elevation of calculated HWL floods probability of 1‰ (millennial HWL).

Technical documentation was finished in 2012. The main project was done in 2012, based on results of conceptual project, particularly in terms of protection level and reconstruction technology of the levee („Ehting“, Belgrade). Technical review is in preparation (using the experience of flood defense in 2014). Administrative activities for selection of optimal locations for borrow pits, resolving property related issues (18-20 ha) on the banquettes and locations of borrow pits and obtaining construction permit (based on the prepared agreements with local governments) are in progress. The expected deadline for the completion of all the preparatory activities is 3-4 months. Period for realisation is 18 months, considering limitations caused by low and high water level.

The real value of works is estimated at an amount of EUR 10 million, with needed reserve funds in case of unexpected changes of work conditions.





## **Result 2. Improved flood protection infrastructure in the Sava river basin in Bosnia and Herzegovina, affecting Republic of Serbia**

The expected deadline for the completion of all the preparatory activities for Result 2 is up to 6 months. Period for implementation of all activities for Result 2 is up to 30 months including tendering procedures and awarding the contracts for works and supervision.

### **Activity 2.1. Recovering flood protection infrastructure in the Tuzla Canton watersheds, Federation of Bosnia and Herzegovina.**

The expected deadline for the completion of all the preparatory activities for Activity 2.1 is 4-6 months. Period for implementation of all activities for Activity 2.1 is additional 30 months having in mind the plenitude of construction sites and considering limitations caused by low and high water level.

This activity consists of five similar sub-activities:

#### **2.1.1. Recovery of Modrac dam – phase IV.**

This sub-activity consists of building of consoles on the existing counterforts and building new ceilings (3, 4 and 5) downstream next to the existing ones. So far, ceilings 1 and 2 (Phase I), 10 and 9 (Phase II) were finished and ceilings 8, 7 and 6 are being built (Phase III). New foundations were built beneath the existing ones. Property issues have been solved. Main reconstruction project has been developed. Key problem is that the statics of the dam were damaged and functionality has not been ensured. Overall recovery of the dam started in phases as early as in 2007. Phase III is ongoing and financially covered. The condition of the dam worsened during the May 2014 floods. Inhabitants and industry nearby in Lukavac, Gračanica, Petrovo, Dobož East, Dobož and downstream the Bosna river are endangered.

#### **2.1.2. Regulating/fixing the riverbed of the Tinja river at Srebrenik (ca. 1,3 km)**

All the sub-activities that include fixing/regulating the river-bed, the works will include: coating the natural slopes in order to prevent erosion and building stabilizing cascades. The works will also include ground work like preparation of underlayer, building filters and creation of coating. By doing these works, the river-bed will be protected considering the 1/100 year flood rank and including a protecting overlight.

3000 inhabitants of Srebrenik and 20 economic facilities are endangered by flooding of Tinja river.

#### **2.1.3. Regulating/fixing the riverbed of the Sapna river in Sapna municipality (ca. 750 m)**

Main reconstruction design has been developed. Property and legal issues have been solved. The works are to recover the damaged parts of the riverbed, protect it from future floods and to protect the road infrastructure.

#### **2.1.4. Regulating/fixing the riverbed of Jala and Turija rivers in Lukavac municipality (5,4 km);**

The works will connect the two already fixed riverbeds of the Jala river in the length of 3,2 km, return the Turija river mainstream to the original riverbed and fix the embankments in the length of 2,2 km. The aim is to protect the agricultural land in Bokavići, Bistračko and Turijsko fields. Property issues have been solved in the Lukavac municipality. Others property issues could be solved shortly.

#### **2.1.5. Regulating/fixing the riverbed of the Drinjača river in the Kladanj municipality (ca. 180 m).**

Property and legal issues have been solved. Main reconstruction design has been developed. The aim is to protect housing areas, economic facilities, agricultural land and road infrastructure from floods.

## **Activity 2.2. Protecting the area from high level waters of Drina river, Republika Srpska.**

This activity consists of four similar sub-activities of reconstructing embankments and one activity focusing on disposing inland waters. Exact quantities of works in the main riverbed will be defined in the main project documents.

It is expected that it will be needed up to 4 months for the preparatory activities, and 18 months for the implementation of activities under Activity 2.2

### **2.2.1. Construction of the left protection embankment on Drina river (ca. 2, 0 km long)**

### **2.2.2. Construction of the right protection embankment on Sapna river (ca. 1,4 km long)**

The activities aiming at constructing and reconstructing embankments and regulating/fixing the riverbed will include removing of “bottlenecks” (sandbanks) and, where needed, profiling the riverbed aiming to direct the mainstream in the best possible way in order not to endanger the reconstructed embankment.

### **2.2.3. Building network of channels for inland drainage and building protecting embankments in the area “Ekonomija“ in Zvornik**

In the last 20 years, the settlement “Ekonomija” has developed on the left side of Drina river in the inundation area. Its borders are main road Bijeljina-Zvornik in the east, river Drina in the west and south, and river Sapna in the north. The settlement was built on a low-level terrain, which used to be used for agriculture exclusively, and is subject to floods from Drina and Sapna, without a possibility for natural drainage of its own of precipitation waters, but also due to the configuration of the terrain and due to the periods of higher-level water of Drina and Sapna. The settlement’s development did not follow compliance with water-resilient infrastructure (facilities for protection from external and inland waters). By constructing embankment for the protection of “Ekonomija” settlement from high waters of the rivers Sapna and Drina it will also require solving the problem of drainage and disposal of inland precipitation waters from ca. 2 km<sup>2</sup>.

Disposal of inland waters implies construction of:

- primary, secondary and tertiary channel networks for inland disposal,
- gravity drain of primary channel network in the site where channel crosses through the embankment (Drina or Sapna embankment) in the periods of lower water levels of Drina and Sapna rivers,
- cross-pump station at the gravity drain facility for transferring inland waters in the periods of high water levels of Drina and Sapna rivers.

### **2.2.4. Protection of the damaged Drina river embankments in the area of Zvornik and Bijeljina (4,5 km)**

### **2.2.5. Protection of the Drina river embankment in the Bratunac area (1,6 km)**

The December 2010 floods in Zvornik and Bratunac municipalities eroded the Drina river watersides considerably. The erosion and degradation process was intensified significantly after the May 2014 floods. There are a series of localities in the need of urgent stabilization measures and to secure eroding watersides in order to prevent taking away of agricultural land, endangering household facilities, road, communal and electro infrastructure. Stability of the main riverbed will be ensured by constructing and securing destabilized watersides, particularly those concave ones, where degradation and erosion are the biggest. At some locations, it is only possible to start constructing protective embankments after stabilization, in order to entirely protect the area from intrusion of huge waters. Negative effects that the mainstream of huge waters caused on the watersides of the main riverbed are reflected in the damages of the constructed watersides that were in principle built in concave curves of the stream and in the damages on the watersides that were not included in the regulatory works of the main riverbed.

## **Activity 2.3. Reconstructing the flood protection infrastructure on the river Brka (0,71 km)**

Reconstruction works imply regulating/fixing the river Brka riverbed (Phase I) on the section from the existing regulated part of the riverbed to the bridge MZ Klanac in the length of 710,52 meters. . Total length of the riverbed to be reconstructed in three phases is 2,063 km, and the river Zovicica (phase IV) 0,5 km. At the moment, the reconstructed riverbed is 1,44 km of length.

The regulation is planned in 4 phases, and this action is focused on the Phase I. This phase is in the urban part of the area, inhabited by ca 2500 people. The river Brka runs into the river Sava right in the urban part of the Brka settlement. The river Brka often affects the urban area, but also – particularly during flash floods, like those in 2014, collects huge quantities of debris and transfers that to the Sava river thus influencing the Sava river riverbed's capacity to absorb additional water.

The planned works are about building hydro-construction facilities: downstream transition section, cross-cutting and longitudinal stabilizing brinks, waterside background facilities, parapet walls facilities, mouth of the river Zovicica facility, embankments and upstream transition sections.

Solving of property and other legal issues is in process and will be completed shortly.

Main reconstruction project document has been done for this phase and for all other phases of reconstruction of the flood protection infrastructure on the rivers Brka and Zovicica.

A six-month period is needed for preparatory activities and 12 months for the implementation, which gives a total of 18-month period.

Risks and preconditions:

It is expected that property issues will be solved timely without requesting additional external financial resources (Activities 2.1.2, 2.1.4, 2.2.1-5, 2.3.)

For Activity 2.2.3 project documentation at the level of main construction project is needed. It is expected that it will be done without requesting additional external financial resources

**INDICATOR MEASUREMENT**

<b>Indicator</b>	<b>Description</b>	<b>Baseline (2014)</b>	<b>Last (2014)</b>	<b>Milestone 2017</b>	<b>Target 2020</b>	<b>Source of information</b>
<b>Result 1</b>	<b>Immediate results indicator</b>					
km of reconstructed embankments (Serbia)	km of reconstructed embankments in the Republic of Serbia			15,991 km	15,991 km	Site visits, invoices, reports produced by Water directorate, PE Srbija Vode during and after rehabilitation works/repairs Annual Report on the state of the environment in the Republic of Serbia
<b>Result 2</b>	<b>Immediate results indicator</b>					
% of improved flood protection facilities (Bosnia and Herzegovina)	% of flood protection facilities improved in Bosnia and Herzegovina	Not applicable	60% Tuzla Canton, Modrac dam (% of completion: (first and second phase out of four phases completed, third phase ongoing) Ekonomija Zvornik settlement: (% of completion of network of channels and pumping station/s)	Tuzla Canton, Modrac dam: 100% Ekonomija, Zvornik 60%	Tuzla Canton Modrac dam: 100% Ekonomija, Zvornik 90%	Action progress reports Competent institutions annual reports
Km of reconstructed flood protection infrastructure (Bosnia and Herzegovina)	Km of reconstructed flood protection infrastructure in Bosnia and Herzegovina	Not applicable Brcko District: 1,44	Not applicable	Tuzla Canton: 7,5 Drina: 9,5 Brcko District: 2.0	Tuzla Canton: 12.0 Drina: 9,5 Brcko District: 2.5	Action progress reports Competent institutions annual reports

## **5. CROSS-CUTTING ISSUES**

### **ENVIRONMENT AND CLIMATE CHANGE (AND IF RELEVANT DISASTER RESILIENCE)**

Environment in relation to this Action is not a cross-cutting issue but is in fact a central topic for most of the interventions of this Action: a significant component of the envisaged assistance indeed relates to environment and disaster resilience.

This Action directly relates to environmental issues and all anticipated actions were designed to have positive impact on “Rio markers”. The Action contributes to reducing the vulnerability of human or natural systems to the impacts of climate change and climate-related risks by maintaining or increasing adaptive capacity and resilience.

### **ENGAGEMENT WITH CIVIL SOCIETY (AND IF RELEVANT OTHER NON-STATE STAKEHOLDERS)**

In both Bosnia and Herzegovina and Serbia, a significant contribution to the implementation of this Action is expected from the side of the CSOs, especially from those ones dealing with humanitarian aid and local development. Immediate aid through the mobilisation of CSOs has been provided at the moment of the flood (charity, direct assistance to victims of the disasters, provision of voluntary support, benefits campaigns, collection of goods and medicines, etc.) with the participation of private subjects, citizens and CSOs. A similar degree of involvement of CSOs is not expected during the post-flood recovery, however the involvement of CSOs is still substantial for the implementation of the Action and essential for the achievement of its results.

In order to enable more inclusive and transparent dialogue, consultation and communication with all relevant stakeholders in the respective sectors, a consultation mechanism with the civil society organisation (CSOs) has been established in Serbia in 2011. This mechanism is based on the consultative process with Sectorial Civil Society Organisations (SECOs) and serves as a platform that enables exchange of information and contribution of CSOs in relation to planning development assistance, particularly programming and monitoring of the IPA. A sectorial civil society organization indicates a consortium of maximum three civil society organizations as partners, one of which is clearly indicated as leading partner. The SECO consortium for the environment sector actively contributes to the creation of recommendations within the network and influence official documents and provides recommendations for defining priorities for financing from EU funds and development assistance.

In Bosnia and Herzegovina, inputs from civil society deemed critical in a wide consultation process that took place within the Recovery Need Assessment of May-June 2014, which was conducted all over the flood-affected areas. The civil society was involved through participation of various networks and civil society organisations. All relevant stakeholders from various levels of the government in Bosnia and Herzegovina as well as non-state stakeholders have had a chance to take an active role in the consultation process in the aftermath of the floods of May 2014 and helped to prepare the priority list of flood-recovery measures.

Centre for Promotion of Civil Society in Bosnia and Herzegovina (CPCD) – a founder of the Balkan Civil Society Development Network - has been actively responding to the challenges related to the floods in May 2014 and afterwards. On October 1, 2014, CPCD organised a conference “Are we ready for new floods?” involving representatives from competent institutions and aiming to assist joining efforts of civil society and competent institutions in Bosnia and Herzegovina for more effective disaster response and post/recovery efforts in the future.

### **EQUAL OPPORTUNITIES AND GENDER MAINSTREAMING**

As the National Strategy for Improved Status of Women and Gender Equality Promotion (2009-2015) obliges for equal participation of women and men in decision making at all levels and in all policy areas, greater involvement of women in actions described, regarding policies and decision-making processes will be promoted.

A number of steps have already been undertaken to address gender issues, such as production of the report that is integral part of the Recovery Needs Assessment (RNA) report. The report examines gender through various elements, such as:

- Roles and participation of women and men;
- Employment and livelihoods;
- Impact on Women's Workloads;
- Housing, Land and Property;
- Education, Health, Social Services;
- Collective centres
- and provides assessment in terms of estimation of costs of women's unpaid labour in flood recovery and estimation of gender-related recovery and reconstruction needs.

However, the report states that the absence of sex-disaggregated disaster impact information across all sectors makes it impossible to reliably apportion damages and losses by sex.

At activity level, it will be ensured that the fundamental principles of promoting equality and combating discrimination are guaranteed on the basis of equal access regardless of sex. The Action acknowledges women's contributions in the informal sector and at household level as a critical factor.

This Action represents further efforts to move beyond humanitarian assistance and relief programs to more long-term development programs and thus is driven also by a gender perspective to be effective in securing sustainable, people-centred development. Implementing partners will be encouraged to address the specific needs and priorities of both women and men in planning processes and allocation of resources especially because of differential impacts of floods in relation to health, education, food supplies, water and sanitation, energy and other basic supplies, as well as employment and income generating opportunities. Thus, the pipeline of flood related Actions (IPA 2012, IPA 2013, IPA 2014, EU solidarity fund) in wider perspective, requires taking into consideration of women's needs in the prioritization of investments, as well as throughout the project cycle. Gender-related recovery and reconstruction costs necessarily shall include measures to mitigate increased gender gaps and disadvantage caused by the disaster.

## **MINORITIES AND VULNERABLE GROUPS**

In all activities during this Action steps will be taken to ensure that the rights of minorities are taken into account in both Bosnia and Herzegovina and Serbia.

Through this Action, Bosnia and Herzegovina will assist the rehabilitation of local communities with the most vulnerable groups, particularly in the Janja and Tuzla Canton regions, which are densely populated mostly by refugees and returnees.

## **6. SUSTAINABILITY**

The proposed Action will produce sustainable results in the short run, as part of the long-term plan of post-flood reconstruction. The four-step approach of the Government is based on the coordination of national and international donor efforts, and the reconstruction of the electric power system, road infrastructure, repair of the damage on houses and other facilities and support to further economic growth.

The Action represents a second stage in provision of support that will allow the recovery in sectors as energy and mining, civil protection and environment and climate change, thus allowing also provision of related services. In the long-term, it will provide the chance for a strong and sustainable economic and social development to take place in affected areas and wider across country, returning to at least the pre-flood levels in terms of key economic and social indicators.

The intended project will ensure adoption of best practices and fulfilment of commitments under the SAA and the EU *Acquis* and the best European practices in the field of construction.

The high involvement of the key stakeholders in Bosnia and Herzegovina in the Action design so far, and their firm commitment to the implementation manifested in the process of developing the

comprehensive Action Plan for Flood Protection and Water Management for Bosnia and Herzegovina in line with EC recommendations has already created a strong sense of ownership and commitment to further developing regional cooperation in the area of water. This action presents only one step to be built on in the developing process of this cooperation.

Intervention within this action in the Brcko District of Bosnia and Herzegovina is one of the four phases foreseen by the main reconstruction project of regulating the Brka and Zovicica riverbeds. The project is a part of the Brcko District Development Strategy 2008-2017 (Operational objective O5: Increase the flood protection level”). Maintenance of the riverbed reconstructed within this action is planned and budgeted by the Department for Agriculture, Forestry and Water Management of the Government of the Brcko District of Bosnia and Herzegovina.

## **7. COMMUNICATION AND VISIBILITY**

The visibility will be organised to promote the exchange of experiences, constraints and best practices achieved on the provision of the assistance.

The main aims of the publicity / visibility requirements are to increase the public awareness and transparency over the activities and to inform potential beneficiaries about the results achieved by the provision of assistance.

All activities must be carried out in accordance to the Communications and Visibility Manual for EU External Action. Publicity must be ensured in accordance with the applicable rules on the visibility of external actions laid down and published in the “EU guidelines on visibility” available on: [http://ec.europa.eu/europeaid/work/visibility/index\\_en.htm](http://ec.europa.eu/europeaid/work/visibility/index_en.htm).

The visibility issues must be respected all types of communications written correspondence and preparation of deliverables (brochures, posters, newsletters, pamphlets and other type of informative material). The standard formats will be used in briefings, newsletters, press conferences, presentations, invitations, and signs, to highlight EU participation. The key tools of information and communication are:

- Media – press releases, press events, interviews, background papers, project visits
- Events – forums, information days, workshops, professional debates, seminars, conferences, project presentations, other regional events

Publications – newsletters, brochures, leaflets, project information sheets, reports, studies, programme presentation summaries

- Publications Internet pages
- Others: billboards, plagues, stickers, flags, maps, posters and tables.

All the deliverables to be published / issued required prior approval by the contracting authority.